

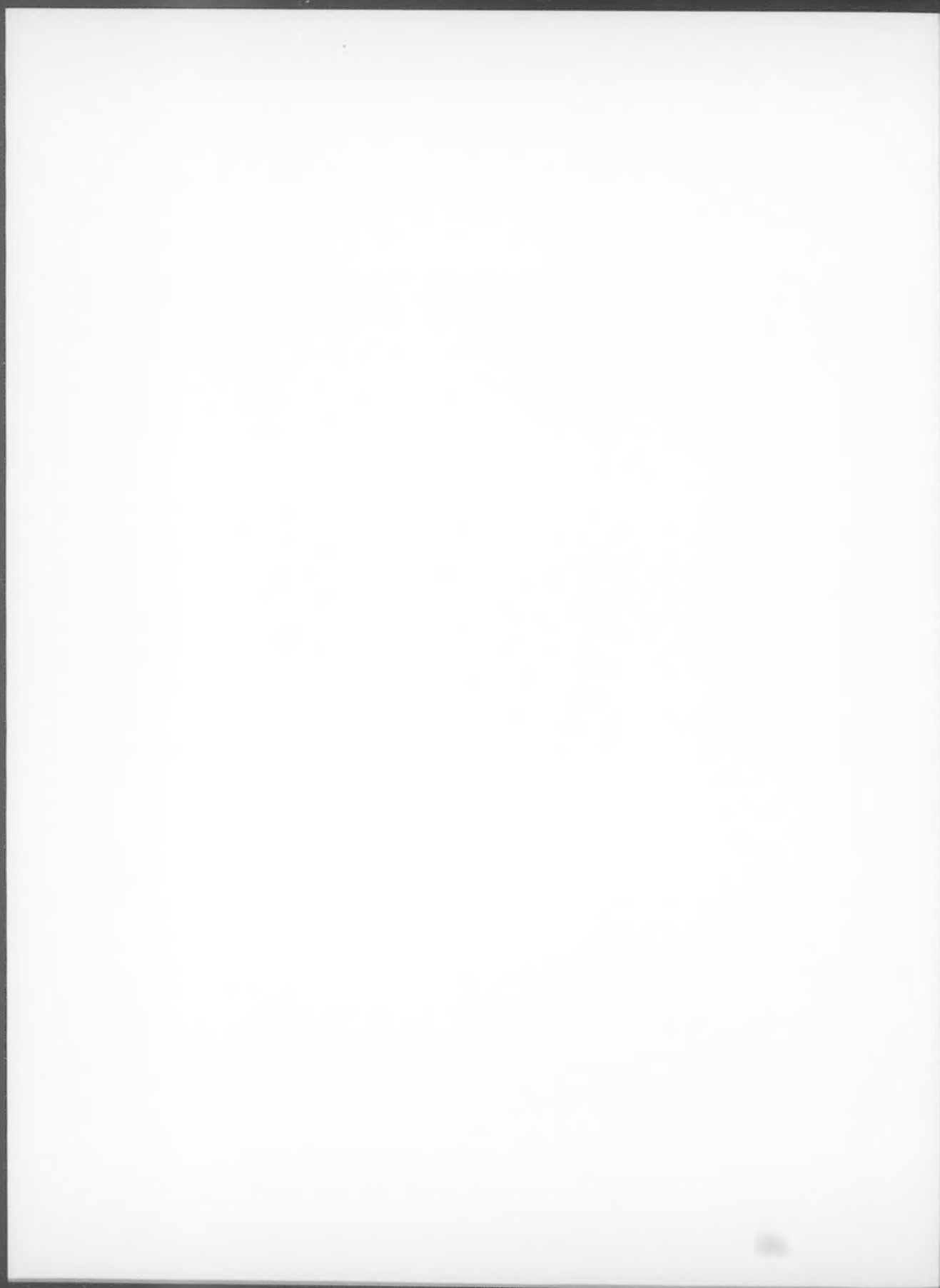
## Author index

- Aas, V., Rokling-Andersen, M., Wensaas, A.J., Thoresen, G.H., Kase, E.T. & Rustan, A.C. Lipid metabolism in human skeletal muscle cells: effects of palmitate and chronic hyperglycaemia, 31
- Andersson, A. *see* Jansson, L.
- Aravindan, N., Williams, M.T., Riedel, B.J.C.J. & Shaw, A.D. Transcriptional responses of rat skeletal muscle following hypoxia-reoxygenation and near ischaemia-reperfusion, 367
- Arias, E.B. & Cartee, G.D. Relationship between protein O-linked glycosylation and insulin-stimulated glucose transport in rat skeletal muscle following calorie restriction or exposure to O-(2-acetamido-2-deoxy-D-glucopyranosylidene)amino-N-phenylcarbamate, 281
- Bądzynska, B. *see* Walkowska, A.
- Bak, Z. *see* Rousseau, A.
- Barnekow-Bergkvist, M. *see* Bergfors, M.
- Bashan, N. *see* Rudich, A.
- Benito, M. *see* Valverde, A.M.
- Ben-Romano, R. *see* Rudich, A.
- Bergfors, M., Barnekow-Bergkvist, M., Kalezic, N., Lyskov, E. & Eriksson, J.W. Short-term effects of repetitive arm work and dynamic exercise on glucose metabolism and insulin sensitivity, 345
- Bernard, J.R., Crain, A.M., Rivas, D.A., Herr, H.J., Reeder, D.W. & Yaspelkis III, B.B. Chronic aerobic exercise enhances components of the classical and novel insulin signalling cascades in Sprague-Dawley rat skeletal muscle, 357
- Biaggioni, I., Robertson, D., Eckberg, D.L. for the Neurolab Investigators Reply, 334
- Birch, K.M. *see* Morse, C.I.
- Blangsted, A.K., Vedsted, P., Sjogaard, G. & Sogaard, K. Intramuscular pressure and tissue oxygenation during low-force static contraction do not underlie muscle fatigue, 379
- Bodin, B. *see* Jansson, L.
- Boon, N. *see* Schrauwen, P.
- Booth, F.W. *see* Machida, S.
- Boudreau, J. *see* Quadrilatero, J.
- Bove, M., Ruth, M., Lundell, L. & Ny, L. Epithelial barrier integrity and intraluminal nitric oxide production in response to acid perfusion of the ferret oesophagus, 211
- Bulhak, A.A., Gourine, A.V., Gonon, A.T., Sjöquist, P.-O., Valen, G. & Pernow, J. Oral pre-treatment with rosuvastatin protects porcine myocardium from ischaemia/reperfusion injury via a mechanism related to nitric oxide but not to serum cholesterol level, 151
- Carlsson, P.-O. *see* Jansson, L.
- Cartee, G.D. *see* Arias, E.B.
- Carter, A.M. *see* Jensen, R.I.
- Cheung, S.S. *see* Geurts, C.L.M.
- Cholewa, B.C., Meister, C.J. & Mattson, D.L. Importance of the renin-angiotensin system in the regulation of arterial blood pressure in conscious mice and rats, 309
- Christensen, N.J. & Norsk, P. The fallacy of plasma noradrenaline spillover measurements, 333
- Clausen, T. & Gissel, H. Role of Na<sup>+</sup>/K<sup>+</sup> pumps in restoring contractility following loss of cell membrane integrity in rat skeletal muscle, 263
- Crain, A.M. *see* Bernard, J.R.
- Diel, P. *see* Matsakas, A.
- Drust, B., Rasmussen, P., Mohr, M., Nielsen, B. & Nybo, L. Elevations in core and muscle temperature impairs repeated sprint performance, 181
- Dugas, J.P. *see* Saunders, A.G.
- Eckberg, D.L. *see* Biaggioni, I.
- Eriksson, J.W. *see* Bergfors, M.
- Eriksson, J.W. *see* Giorgino, F.
- Eriksson, L. *see* Kaikkonen, M.
- Etzion, S. *see* Rudich, A.
- Fraga, S. *see* Magro, F.
- Friedel, A. *see* Matsakas, A.
- Furuya, H. *see* Saiki, C.
- Gerdle, B. *see* Sandberg, M.
- Geurts, C.L.M., Sleivert, G.G. & Cheung, S.S. Local cold acclimation of the hand impairs thermal responses of the finger without improving hand neuromuscular function, 117
- Giorgino, F., Laviola, L. & Eriksson, J.W. Regional differences of insulin action in adipose tissue: insights from *in vivo* and *in vitro* studies, 13
- Gissel, H. *see* Clausen, T.
- Gonon, A.T. *see* Bulhak, A.A.
- Gourine, A.V. *see* Bulhak, A.A.
- de Gritz, B. *see* Kaikkonen, M.
- Guan, J. *see* Quadrilatero, J.
- Gumà, A. *see* Zorzano, A.
- Handberg, A. *see* Zierath, J.R.
- Harlén, M. *see* Sogaard, P.
- Herr, H.J. *see* Bernard, J.R.
- Hertrampf, T. *see* Matsakas, A.
- Hesselink, M.K.C. *see* Schrauwen, P.
- Hoffman-Goetz, L. *see* Quadrilatero, J.
- Hoh, J.F.Y. Laryngeal muscle fibre types, 133
- Hori, S. *see* Nakagaki, I.
- Hwang, P.H. *see* Kim, J.C.
- Janerot-Sjöberg, B. *see* Rousseau, A.
- Jansson, L., Carlsson, P.-O., Bodin, B., Andersson, A. & Källskog, Ö. Neuronal nitric oxide synthase and splanchnic blood flow in anaesthetized rats, 257
- Jensen, B.L. *see* Jensen, R.I.
- Jensen, J. *see* Zierath, J.R.
- Jensen, R.I., Carter, A.M., Skott, O. & Jensen, B.L. Adrenomedullin expression during hypoxia in fetal sheep, 219
- Johns, E.J. *see* Walkowska, A.
- Kaikkonen, M., de Gritz, B. & Eriksson, L. Short-term distribution of <sup>134</sup>Cs in relation to <sup>51</sup>Cr-EDTA after intravenous dose in goats, 321
- Kalezic, N. *see* Bergfors, M.
- Källskog, Ö. *see* Jansson, L.
- Kase, E.T. *see* Aas, V.
- Kawano, F. *see* Kim, J.C.
- Kim, C.K. *see* Kim, J.C.
- Kim, H.J. *see* Kim, J.C.

- Kim, J.C., Yi, H.K., Hwang, P.H., Yoon, J.S., Kim, H.J., Kawano, F., Ohira, Y. & Kim, C.K. Effects of cold-water immersion on VEGF mRNA and protein expression in heart and skeletal muscles of rats, 389
- Kompanowska-Jezierska, E. *see* Walkowska, A.
- Kuhlmann, C.R.W., Most, A.K., Li, F., Münz, B.M., Schaefer, C.A., Walther, S., Raedle-Hurst, T., Waldecker, B., Piper, H.M., Tillmanns, H. & Wiecha, J. Endothelin-1-induced proliferation of human endothelial cells depends on activation of  $K^+$  channels and  $Ca^{2+}$  influx, 161
- Lambert, M.I. *see* Saunders, A.G.
- Laviola, L. *see* Giorgino, F.
- Li, F. *see* Kuhlmann, C.R.W.
- Lindberg, L.-G. *see* Sandberg, M.
- Lorenzo, M. *see* Valverde, A.M.
- Lundell, L. *see* Bove, M.
- Lyskov, E. *see* Bergfors, M.
- Machida, S. & Booth, F.W. Changes in signalling molecule levels in 10-day hindlimb immobilized rat muscles, 171
- Magro, F., Fraga, S., Ribeiro, T. & Soares-da-Silva, P. Regional intestinal adaptations in  $Na^+$ ,  $K^+$ -ATPase in experimental colitis and the contrasting effects of interferon- $\gamma$ , 191
- Marra, S. *see* Quadrilatero, J.
- Matsakas, A., Friedel, A., Hertrampf, T. & Diel, P. Short-term endurance training results in a muscle-specific decrease of myostatin mRNA content in the rat, 299
- Matsumoto, S. *see* Saiki, C.
- Mattsson, D.L. *see* Cholewa, B.C.
- Meister, C.J. *see* Cholewa, B.C.
- Mohr, M. *see* Drust, B.
- Moonen-Kornips, E. *see* Schrauwen, P.
- Morse, C.I., Thom, J.M., Birch, K.M. & Narici, M.V. Changes in triceps surae muscle architecture with sarcopenia, 291
- Most, A.K. *see* Kuhlmann, C.R.W.
- Münz, B.M. *see* Kuhlmann, C.R.W.
- Nakagaki, I., Sasaki, S., Yahata, T., Takasaki, H. & Hori, S. Cytoplasmic and mitochondrial  $Ca^{2+}$  levels in brown adipocytes, 89
- Narici, M.V. *see* Morse, C.I.
- Nielsen, B. *see* Drust, B.
- Nilsson, P. *see* Sögarð, P.
- Noakes, T.D. *see* Saunders, A.G.
- Norsk, P. *see* Christensen, N.J.
- Ny, L. *see* Bove, M.
- Nybo, L. *see* Drust, B.
- Ohira, Y. *see* Kim, J.C.
- Palacin, M. *see* Zorzano, A.
- Pernow, J. *see* Bulhak, A.A.
- Piper, H.M. *see* Kuhlmann, C.R.W.
- Quadrilatero, J., Guan, J., Boudreau, J., Marra, S. & Hoffman-Goetz, L. Polyethylene glycol but not mifepristone prevents intestinal lymphocyte loss following treadmill exercise in mice, 201
- Raedle-Hurst, T. *see* Kuhlmann, C.R.W.
- Rasmussen, P. *see* Drust, B.
- Reeder, D.W. *see* Bernard, J.R.
- Ribeiro, T. *see* Magro, F.
- Riedel, B.J.C.J. *see* Aravindan, N.
- Rivas, D.A. *see* Bernard, J.R.
- Robertson, D. *see* Biaggioni, I.
- Rokling-Andersen, M. *see* Aas, V.
- Rousseau, A., Bak, Z., Janerot-Sjöberg, B. & Sjöberg, F. Acute hyperoxaemia-induced effects on regional blood flow, oxygen consumption and central circulation in man, 231
- Rudich, A., Ben-Romano, R., Etzion, S. & Bashan, N. Cellular mechanisms of insulin resistance, lipodystrophy and atherosclerosis induced by HIV protease inhibitors, 75
- Russell, A.P. *see* Schrauwen, P.
- Rustan, A.C. *see* Aas, V.
- Ruth, M. *see* Bove, M.
- Sadowski, J. *see* Walkowska, A.
- Saiki, C., Seki, N., Furuya, H. & Matsumoto, S. The acute effects of insulin on the cardiorespiratory responses to hypoxia in streptozotocin-induced diabetic rats, 107
- Sandberg, M., Zhang, Q., Styf, J., Gerdle, B. & Lindberg, L.-G. Non-invasive monitoring of muscle blood perfusion by photoplethysmography: evaluation of a new application, 335
- Sasaki, S. *see* Nakagaki, I.
- Saunders, A.G., Dugas, J.P., Tucker, R., Lambert, M.I. & Noakes, T.D. The effects of different air velocities on heat storage and body temperature in humans cycling in a hot, humid environment, 241
- Schaefer, C.A. *see* Kuhlmann, C.R.W.
- Schrauwen, P., Russell, A.P., Moonen-Kornips, E., Boon, N. & Hesselink, M.K.C. Effect of 2 weeks of endurance training on uncoupling protein 3 content in untrained human subjects, 273
- Seki, N. *see* Saiki, C.
- Shaw, A.D. *see* Aravindan, N.
- Shepherd, P.R. Mechanisms regulating phosphoinositide 3-kinase signalling in insulin-sensitive tissues, 3
- Sjöberg, F. *see* Rousseau, A.
- Sjogaard, G. *see* Blangsted, A.K.
- Sjöquist, P.-O. *see* Bulhak, A.A.
- Skott, O. *see* Jensen, R.I.
- Sleivert, G.G. *see* Geurts, C.L.M.
- Soares-da-Silva, P. *see* Magro, F.
- Sogaard, K. *see* Blangsted, A.K.
- Sögarð, P., Harlén, M., Svensson, L.T., Zierath, J.R. & Nilsson, P. Integration of mathematical and experimental approaches to resolve insulin signalling, 125
- Styf, J. *see* Sandberg, M.
- Svensson, L.T. *see* Sögarð, P.
- Takasaki, H. *see* Nakagaki, I.
- Thom, J.M. *see* Morse, C.I.
- Thoresen, G.H. *see* Aas, V.
- Tillmanns, H. *see* Kuhlmann, C.R.W.
- Tucker, R. *see* Saunders, A.G.
- Valen, G. *see* Bulhak, A.A.
- Valverde, A.M., Benito, M. & Lorenzo, M. The brown adipose cell: a model for understanding the molecular mechanisms of insulin resistance, 59
- Vedsted, P. *see* Blangsted, A.K.
- Waldecker, B. *see* Kuhlmann, C.R.W.
- Walkowska, A., Bądzynska, B., Kompanowska-Jezierska, E., Johns, E.J. & Sadowski, J. Effects of renal nerve stimulation on intrarenal blood flow in rats with intact or inactivated NO synthases, 99

## Author index

- Walther, S. *see* Kuhlmann, C.R.W.  
Wensaas, A.J. *see* Aas, V.  
Wiecha, J. *see* Kuhlmann, C.R.W.  
Williams, M.T. *see* Aravindan, N.  
  
Yahata, T. *see* Nakagaki, I.  
Yaspelkis III, B.B. *see* Bernard, J.R.  
Yi, H.K. *see* Kim, J.C.  
Yoon, J.S. *see* Kim, J.C.  
  
Zhang, Q. *see* Sandberg, M.  
Zierath, J.R., Handberg, A. & Jensen, J. Foreword, 1  
Zierath, J.R. *see* Sögård, P.  
Zorzano, A., Palacin, M. & Gumà, A. Mechanisms  
regulating GLUT4 glucose transporter expression and  
glucose transport in skeletal muscle, 43



## Subject index

- acid, 211
- adipocytes, 75
- adrenaline, 263
- aerobic exercise, 201
- ageing, 291
- air velocity, 241
- Akt 2 kinase, 357
- aldosterone, 309
- angiogenesis, 389
- animals, 211
- αPKC-ζ/δ kinase, 357
- apoptosis, 75
- architecture, 291
  
- blood flow, 231, 257, 335
- blood glucose, 107
- blood pressure, 309
- BQ-788, 161
- bradycardia, 107
- brown adipocyte, 89
- brown adipocytes, 59
  
- caesium, 321
- calcitonin gene-related peptide, 263
- calcium-activated potassium channel, 161
- catecholamines, 13
- c-Cbl tyrosine phosphorylation, 357
- c-Cbl, 357
- cell proliferation, 161
- cold acclimation, 89, 117
- cold environment, 389
- cold-induced vasodilatation, 117
- Colitis, 191
- confocal laser-scanning microscope, 89
- consumption, 231
- contractile properties, 117
- contraction, 133
- coronary circulation, 151
- cyclic AMP, 263
  
- dehydration, 241
- depolarization, 263
- diabetes, 3
- diabetes mellitus, 43, 107
- diet restriction, 281
- dynamic exercise, 345
- dyslipidaemia, 75
  
- electrical shocks, 263
- electromyography, 379
- electroporation, 263
- endothelial function, 151
- endothelin, 161
- endothelium, 161
- evaporation, 241
- evoked force, 117
- exercise, 43, 241, 273
  
- fatigue, 181
- fatty acid synthase, 59
- ferret, 211
- ferrets, 211
- fibre types, 133
- food restriction, 281
- free fatty acids, 75
  
- gastro-oesophageal reflux, 211
- gene expression, 43, 367
- glucocorticoids, 13, 201
- glucose disposal, 345
- glucose turnover, 13
- glucose-transporter 4, 299
- GLUT4, 59, 357
- growth, 219
- growth and differentiation factor 8, 299
- growth arrest and DNA damage-inducible 45, 171
  
- hand, 117
- heart and skeletal muscles, 389
- heat storage, 241
- hexokinase II, 299
- hexosamine, 281
- histochemistry, 133
- human biceps brachii muscle, 379
- hydroxyacyl-CoA dehydrogenase, 299
- hyperglycaemia, 31
- hyperoxaemia, 231
- hyperoxia, 231
- hyperthermia, 181
- hypoxaemia, 219
- hypoxia, 367
  
- iberiotoxin, 161
- insulin, 13, 31, 107
- insulin receptor substrate, 59
- insulin resistance, 31, 43, 59, 281, 345
- interferon-γ, 191
- intrarenal circulation, 99
- ion transport, 321
- IRS, 3
- ischaemia, 151, 367
  
- JNK, 171
  
- lactate dehydrogenase, 263
- larynx, 133
- lipid metabolism, 31
- lipolysis, 13
- LY294002, 3
- lymphocytes, 201
  
- mechanomyography, 379
- membrane potentials, 211
- mice, 201, 309
- microarray analysis, 367
- mifepristone, 201

- mitochondria, 273
- mitochondrial  $\text{Ca}^{2+}$ , 89
- mitochondrial membrane potential, 89
- muscle, 133
- muscle blood perfusion, 335
- muscle metabolites, 181
- myosin, 133
- myotubes, 31
  
- Na,K-ATPase, 321
- $\text{Na}^+/\text{K}^+$ -ATPase, 191
- near-infrared spectroscopy, 379
- nitric oxide, 151, 211, 257
- nitric oxide synthase, 211
- nitric oxide synthase inhibitors, 99
- non-invasive, 335
  
- obesity, 43
- oesophagus, 211
- oesophagus/physiology/physiopathology, 211
- O-GlcNAcylation, 281
- omental fat, 13
- oxidative stress, 201
- oxygen, 231
  
- p53, 171
- p110, 3
- p85, 3
- p38 MAPK, 171
- palmitate, 31
- pancreas, 257
- pancreatic islets, 257
- penetration depth, 335
- photoplethysmography, 335
- PI 3-kinase, 3, 357
- poly(ADP-ribose) polymerase, 171
- polyethylene glycol, 201
- potential difference, 211
- pregnancy, 219
- PTEN, 3
- $\text{PtO}_2$ , 367
- PUGNAc, 281
  
- rats, 309
- recovery, 379
- renal blood flow, 257
- renal medulla, 99
- renal nerves, 99
- renin-angiotensin system, 309
- reperfusion, 151
- rhodamine123, 89
- rosiglitazone, 59
  
- salbutamol, 263
- sarcopenia, 291
- signalling, 13
- skeletal muscle, 367
- skin blood perfusion, 335
- skin temperature, 117
- sprint performance, 181
- static work, 345
- statins, 151
- subcutaneous fat, 13
- suppressors of cytokine signalling-3, 3
- swimming, 299
  
- thermogenesis, 389
- thermoregulation, 241
- training, 273
- transforming growth factor- $\alpha$ , 59
  
- uncoupling protein, 273
- uncoupling protein-1, 59
  
- vascular smooth muscle cells, 75
- vasoconstriction, 231
- VEGF protein and mRNA, 389
- ventilation, 107
- visceral fat, 13
- voluntary contraction, 379
  
- water immersion, 389
- wortmannin, 3
  
- X-ray microanalysis, 89

